



The Challenges and Opportunities in School Transportation Today

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Every day, 480,000 buses transport more than a third of students through three primary service models

America's fleet of school buses is more than twice the size of all other forms of mass transit combined, including bus, rail, and airline transportation.

480,000 Buses

Roughly 480,000 school buses are currently on the road in the United States.

33% of Students

Based on the National Household Travel Survey, roughly a third of children travel to school on a school bus.

3 Service Models

School transportation is provided through three primary service models: district-provided service, contracted service, and public transit.

The per-student costs of transportation have increased substantially over the last 40 years, putting significant strain on school and district leaders, bus drivers and transportation providers, and students and families.

Both districts and contractors face a number of challenges in school transportation

Executive Summary

Regulatory Landscape	The intersection of federal and state laws related to school transportation means that districts and contractors often operate in complex regulatory environments.
Funding	State funding for school transportation is subject to legislative appropriations and has often been stagnant — requiring districts to offset costs by reducing service, delaying upgrades, or other means.
School Choice	With the growth of school choice options, more students are crossing town to get to and from school, which places new demands on traditional transportation models built around neighborhood schools.
Data Use	School transportation systems typically have access to less and lower-quality data than other transit sectors, reducing their ability to provide service that is efficient and responsive.
Safety	School buses are the safest mode of student transportation, but safety agencies and advocates believe they should include seat belts, and students may face other risks related to traffic and personal safety.
Environmental Impact	Diesel exhaust has negative effects on the environment and children's health, but districts are often slow to replace older buses and make technological upgrades.

Despite these challenges, little has changed in the policy and practice of how students get to school. The iconic yellow school bus continues to dominate school transportation.

Despite these challenges, a number of opportunities exist to improve service and reduce costs

The significant transportation challenges that districts and states face can:

- ✓ Lead to expensive and inefficient service
- ✓ Limit investments that improve safety and reduce environmental impact
- ✓ Create inequitable access to schools

However, there are many opportunities for school transportation to improve and innovate.

- 1 Data & Technology** States and districts should invest in tools and technology to help **collect, analyze, and use data to improve efficiency and make informed decisions** about school transportation systems.
- 2 Funding & Incentives** States should **provide adequate overall funding for school transportation services and incentivize transportation operators** to provide effective and efficient service.
- 3 Capital Investments** States should **support and prioritize capital investments** — like new buses and other infrastructure — which may have higher up-front costs but **lead to substantial savings in the long term**.
- 4 Increased Collaboration** Districts should **consider innovative ways to collaborate on providing school transportation services**, including partnerships between districts, or improved coordination across sectors.

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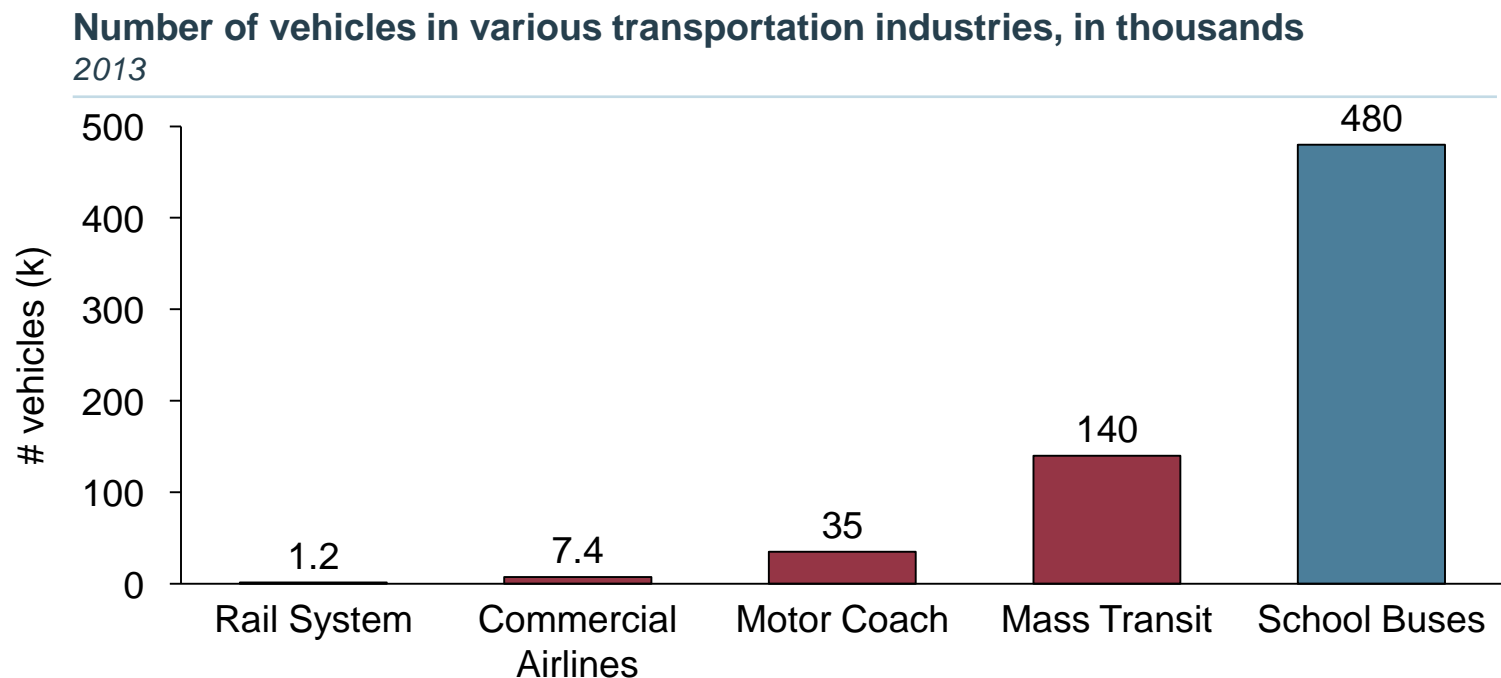
School transportation may be one of the least-studied issues in education policy and practice, but it is vitally important to a system that seeks to provide educational opportunity to all children within the constraints of limited resources. To participate in the public education system, students must get to school safely and on time, and be ready to learn. Families rely on transportation to get their children home each day. Teaching and learning in America's schools largely depends on students being physically present in a classroom.

More broadly, transportation also ties schools directly to their broader communities — whether because of the interface between school buses and public transit, the labor market of bus drivers, or the long-term environmental impact of school bus exhaust.

This deck provides an update of Bellwether's 2017 report ["Miles to Go: Bringing School Transportation Into the 21st Century"](#), which examined the state of school transportation from multiple perspectives, including safety, efficiency, and environmental impact. We hope policymakers, industry leaders, and others find this update is a useful resource for understanding the scope and importance of the school transportation challenge as well as for considering policy decisions that affect school transportation.

The school transportation sector is enormous

Every day, 480,000 school buses transport millions of students to and from school.



America's fleet of school buses is more than twice the size of all other forms of mass transit combined, including bus, rail, and airline transportation.

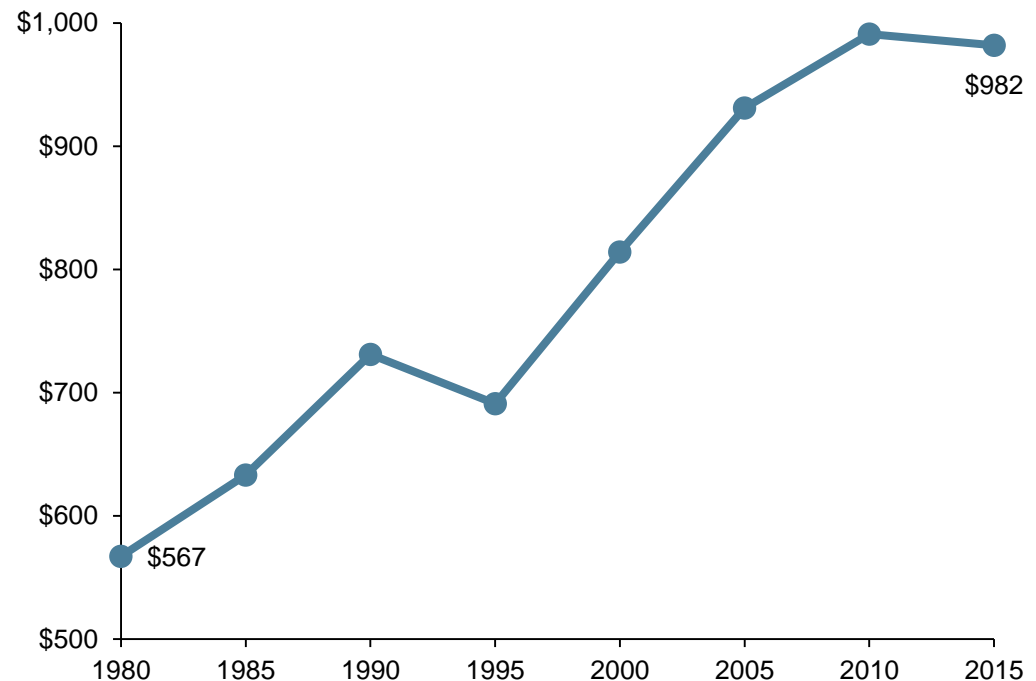
School transportation has become increasingly expensive

Introduction

- According to data from the National Center for Education Statistics, the **total number of students transported to school at public expense has increased since 1980**.
- However, the **share of students who receive transportation services has declined**, as the total student population has increased at a faster rate than students being transported.
- Total **spending on school transportation has also more than doubled since 1980**, and the average cost per student has also increased.

Average transportation cost per student

By year, 1980 to 2015



Since 1980, the **average cost per student has increased by over 73%**, associated in part with a **declining share of students transported**.

School transportation can create daily headaches for students, families, and educators

Introduction

“School Bus Driver Jobs Could Be Filled by Teachers Amid Shortage”

—Indianapolis Star (IN), July 2019

“Busing Concerns Prompt School Response”

—Superior Telegram (MN), September 2018

“Thousands of Hours of Class Time Missed Because of Late CCSD Buses”

—Live 5 News (SC), April 2019

“How Often Are Buses Late at Your Child’s School?”

—Las Vegas Review-Journal (NV), March 2019

“Baltimore County School Board to Address Issues With Delayed School Buses”

—WBAL-TV11 (MD), March 2019

“School Bus Driver Shortage Creates Headaches for Districts”

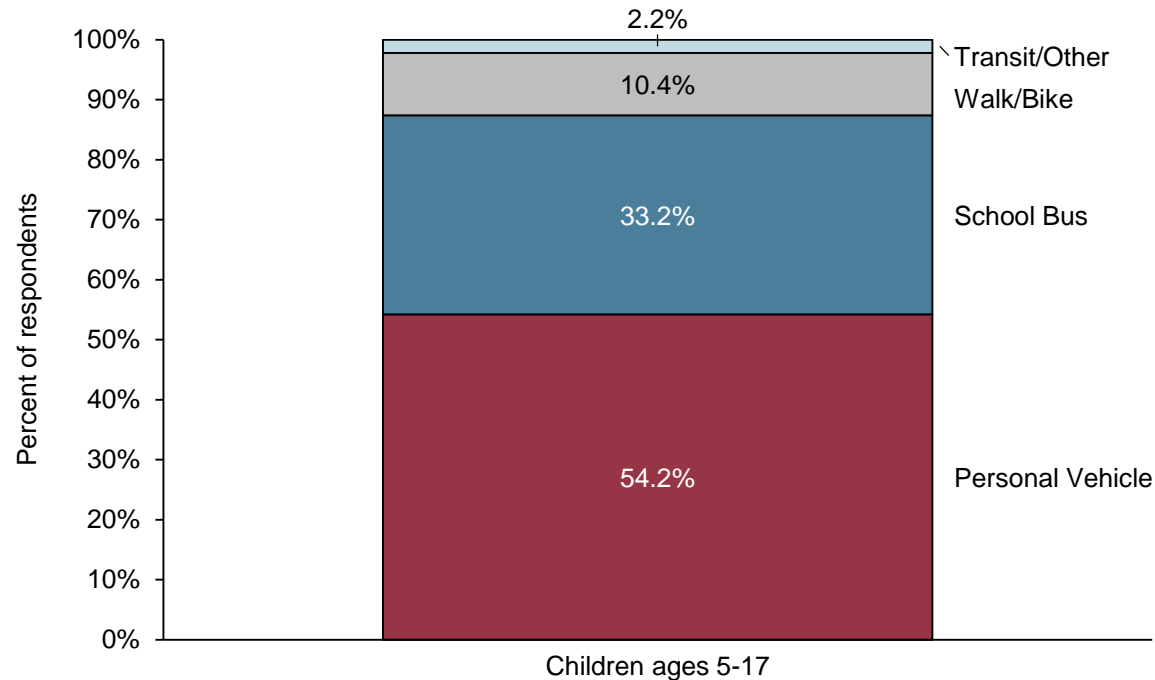
-Associated Press, December 2018

Funding challenges, inefficient service, late or delayed school buses, and driver shortages all create daily headaches not only for schools and districts, but also for children and families. For many, school transportation is the only means by which students can get to and from school.

Many students also travel to school using other modes of transportation

Means of travel from home to school

By transportation mode, 2017



According to the most recent National Household Travel Survey, conducted by the Federal Highway Administration, **roughly a third of children ages 5-17 travel to school on a school bus. A majority travel to school in personal vehicles, like cars,** while smaller shares use other modes, like walking, biking, and public transit.

Glossary of terms, acronyms, laws, agencies, etc. (1/3)

Legislation

- [Diesel Emissions Reduction Act \(DERA\)](#) — a federal law that provides funding for the EPA to award grants and rebates to help replace or retrofit older diesel vehicles, including school buses.
- [Every Student Succeeds Act \(ESSA\)](#) — the most recent reauthorization of the Elementary and Secondary Education Act, which governs the provisions of education services for general education students.
- [Fixing America's Surface Transportation \(FAST\) Act](#) — a federal law governing federal spending on surface transportation, including a limited amount of funding for transportation alternatives that may include “safe routes to schools” projects.
- [Individuals With Disabilities Education Act \(IDEA\)](#) — a federal law governing the provision of education services for students with disabilities.
- [McKinney-Vento Homeless Assistance Act \(McKinney-Vento\)](#) — a federal law governing the provision of education services for students identified as homeless.

Federal Agencies and Other Government Entities (continued on next page)

- [Environmental Protection Agency \(EPA\)](#) — a federal agency that conducts environmental assessment, research, and education, and is responsible for maintaining and enforcing national standards under a variety of environmental laws, including DERA.
- [Federal Transit Administration \(FTA\)](#) — a federal agency within the U.S. Department of Transportation that provides financial and technical assistance to local public transportation systems.
- [Metropolitan Planning Organization \(MPO\)](#) — federally mandated bodies that are required for metropolitan areas with a population of at least 50,000 and that are responsible for producing transportation improvement plans for the region they serve.

Glossary of terms, acronyms, laws, agencies, etc. (2/3)

Federal Agencies and Other Government Entities (continued from previous page)

- [National Highway Traffic Safety Administration \(NHTSA\)](#) — a federal agency within the U.S. Department of Transportation that implements and enforces regulations related to vehicle manufacturing, codified in the FMVSS.
- [National Transportation Safety Board \(NTSB\)](#) — a federal agency responsible for investigating transportation accidents, including plane, ship, and railroad accidents, as well as certain types of highway crashes.

Fuels Used to Power School Buses

- [Diesel](#) — a fuel refined from oil and used in the diesel engines found in most freight trucks, trains, and buses. Since 2006, the EPA has had requirements to reduce the sulfur content of diesel fuel.
- [Propane](#) — an alternative fuel that can be used to power light-, medium-, and heavy-duty vehicles, which is stored onboard vehicles in pressurized tanks.
- [Compressed Natural Gas \(CNG\)](#) — an alternative fuel predominantly made up of methane, which can be used to power light-, medium-, and heavy-duty vehicles. Like propane, it is stored onboard vehicles at high pressures.
- [Electricity](#) — an alternative fuel that can be used as a vehicle's primary fuel (in all-electric vehicles), or used along with other fuels to improve overall efficiency (in hybrid-electric vehicles). Electric vehicles store energy in batteries that can be charged by the electrical grid.

Glossary of terms, acronyms, laws, agencies, etc. (3/3)

Other Important Terms

- [Commercial Driver's License \(CDL\)](#) — a special driver's license certifying that individuals are trained to drive large trucks and buses, including school buses.
- [Federal Motor Vehicle Safety Standards \(FMVSS\)](#) — federal regulations specifying safety requirements for motor vehicles and other safety-related components, systems, and design features.
- [Greenhouse gases \(GHGs\)](#) — emissions primarily consisting of carbon dioxide, which are released from a variety of sources, including burning fossil fuels like oil, coal, and natural gas. When there are increased concentrations of these gases, more heat is trapped in the atmosphere, contributing to global warming.
- [Individualized Education Program \(IEP\)](#) — a written document required for eligible students under IDEA that establishes the details of a student's specialized instruction and any related services.
- [Radio-frequency identification \(RFID\)](#) — a technology allowing digital data (encoded in tags, cards, badges, etc.) to be captured by a reader via radio waves; can be used to collect transit ridership data, track baggage or merchandise, and automatically pay tolls.

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School districts transport students using three primary service models

Service Models

1

District-provided

District-provided transportation service **is the most common operational model**. In a district-run system, districts control all elements of school transportation.

2

Contracting with a private provider

Contracting with a private transportation provider for yellow bus service **is the second most common model** and operates in largely the same way as district-provided service.

3

Reliance on public transit

Reliance on public transit **is the third method**, which is much less common and generally only used in large urban districts with robust public transit systems. Under this method, students commute to school using the city's existing public transit infrastructure.

While there are trade-offs that make each service model **challenging** in some contexts ...

... each model also can offer **opportunities** for some districts or states to increase efficiency, reduce costs, or improve students' experience.

When districts provide transportation, they face challenges like rising costs and increasing route complexity

There is not reliable data on the percentage of districts that provide their own transportation, but districts own about 60% of school buses in the country.

Challenges

Districts around the country are facing **intense pressure to lower costs** in response to cuts in funding for education in tandem with a demand for increased student supports.

High fuel prices, rising maintenance costs, increasingly complex routing logistics, and a lack of capital to invest in new school buses make managing transportation services **prohibitively expensive for some school districts.**

Opportunities

Districts **exercise direct control over decision-making**, including hiring.

Districts **maintain ownership** of buses, which may be hard to regain if they no longer wish to contract.

Districts can **reduce transportation costs in other ways**, like investing in technologies that improve service or by **compensating families for opting out** of district transportation.

Districts that contract with private companies for transportation find it is not a one-size-fits-all solution

Contracting out transportation services may provide cost-saving opportunities for some districts, but in other districts, it may actually increase costs.

Challenges

Expenses hidden in or not included in contracts can drive up the costs of contracting.

Once a district sells its fleet, it **becomes extremely expensive to repurchase buses**, giving districts less leverage in negotiations with contractors.

Contracting is **not a panacea for efficiency issues**, as it doesn't address factors like bell schedules or school location that also affect transportation.

In some states, options for contracting are limited by regulatory constraints or incentives for other models.

Opportunities

If the district **can negotiate favorable contract terms** with a provider who can spread overhead costs across multiple contracts, **contracting for service can potentially save districts money.**

Contracting can provide **immediate savings for districts** if they are using vehicles, drivers, or maintenance staff in inefficient ways.

Districts that rely on public transit often find it can be a cost-effective supplement to yellow bus service

Some states and districts have shrunk transportation costs by eliminating the service. This is most common in urban districts where there are robust public transit systems. Many districts that rely on public transit for school transport do so primarily for students in older grades.

Challenges

Federal **“tripper” regulations*** prevent transit systems from offering service intended only for students.

Some districts only offer discounted passes (as opposed to free passes) that might be **unaffordable for some families.**

Minimum age requirements prevent younger students from leveraging public transit or burden their families by requiring them to accompany young children.

In some communities, there may not be a strong culture of transit ridership, which could impact enthusiasm for the service and the **public’s willingness to subsidize it.**

Opportunities

Relying on public transit can save districts money by reducing the overall need for district- or contractor-provided school transportation services, potentially reducing the number of school buses or drivers needed to transport students.

In Baltimore, improving students’ transit access has been correlated with **increased attendance rates** of middle school students.

*For more information on tripper regulations, see slide 29.

Sources: [Code of Federal Regulations](#) (2004); [Cities+Schools](#) (2014); [The Intersector Project](#) (2014)

Many urban districts offer free or low-cost transit passes to some or all students

Service Models

Districts that partner with public transit take different approaches to the degree of **subsidy**, student **eligibility** requirements, limits on the **hours** when subsidies apply, or limits on the **number of trips** subsidized each day.

City	Students Using Public Transit	Cost to Student	Trip Limits
New York City	K-6 (some); 7-12 (all)	Free	Limited hours, three trips/day
Los Angeles	K-12	Reduced cost	Unlimited
Philadelphia	7-12	Free	Limited hours, two trips/day
Washington, D.C.	All students under age 22	Free	Unlimited
San Francisco	K-12	Prorated by income	Unlimited
Boston	7-12	Reduced cost	Limited to school months
Oakland	K-12	Reduced cost	Unlimited

The District of Columbia offers free rides on its bus and Metrorail during all hours to all students under age 22

Service Models



D.C. fully subsidizes fares for all students — regardless of whether they attend district, charter, or private schools*



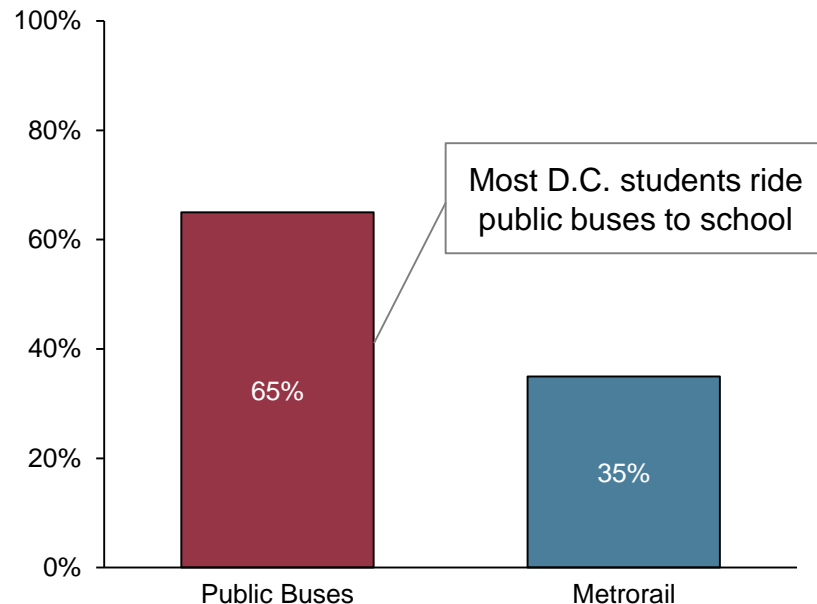
Students ride public transit for free during all hours, including weekends



In D.C., roughly 55,000 student trips are recorded each day

Transit mode share for D.C. students using transit options

By transit mode, 2018



However, the city still faces **transportation challenges**, particularly involving **school choice** and **young students**. If students travel across the city to access educational options, or adults cannot chaperone young children on their way to school, it can be difficult for public transit to adequately meet the needs of families.

*For more on the intersection of transportation and school choice, see slide 40.

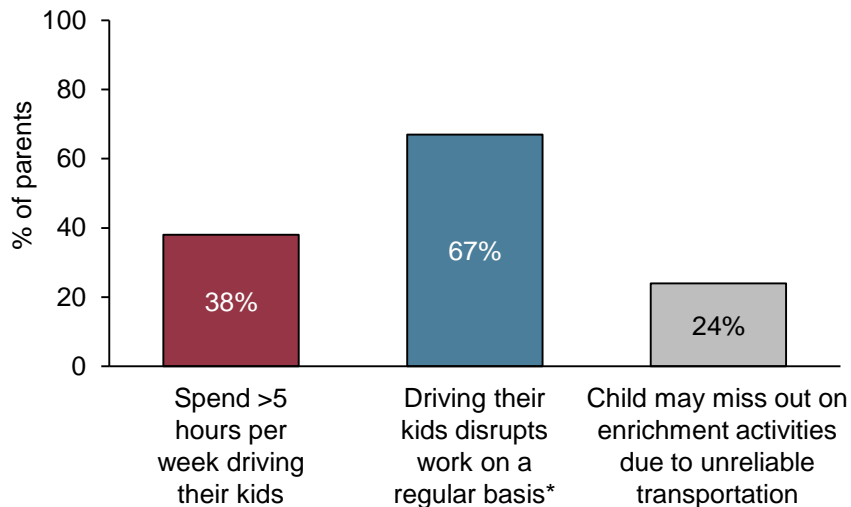
Sources: WMATA data request (2019); [Hechinger Report](#) (2018); [Greater Greater Washington](#) (2017); [WAMU](#) (2018)

Beyond these three dominant service models, some ridesharing services are trying to enter the market

Service Models

Despite current transportation options, **many parents still face challenges transporting their children.**

HopSkipDrive Parent Survey
2017



Multiple **ridesharing options that specifically serve children** have emerged to meet parents' and districts' needs.



Some ridesharing options **allow parents to request trips for their children** — similar to Uber or Lyft — whether the destination be school, extracurricular activities, or elsewhere. Others **partner with schools or districts to supplement transportation** for students with special needs, students who are homeless or in foster care, or other students with challenging transportation needs.

*Includes working parents only.

Sources: [HopSkipDrive](#) (2017); interview with Jonathan Hanover, head of marketplace, HopSkipDrive (2019); desk research

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Districts must comply with regulation of student transportation from both federal and state government

Regulatory Landscape

Federal Law and Regulations

- Minimum requirements for school bus drivers
- Student safety requirements (e.g., requirements for school bus manufacturers)
- Rights and requirements for transportation for students with disabilities, homeless students, and students in foster care
- Limitations on coordination between school districts and public transit agencies

State Law and Regulations

- Additional training requirements for school bus drivers
- Funding, structure, and function of school transportation operations

Both federal and state policy set requirements for school bus drivers

According to the Bureau of Labor Statistics' most recent employment data, the school transportation sector employs roughly 500,000 school bus drivers.

Federal Policy

- Federal regulations require all school bus drivers to obtain a commercial driver's license (CDL), undergo drug and alcohol testing, and receive additional training before transporting children.

State Policy

- While the exact requirements of training vary by state, additional training for school bus drivers ranges from about 10 to 40 hours and includes topics such as behavior management, emergency procedures, and first aid.
- For example, Arizona requires at least 14 hours of classroom training and at least 20 hours of behind-the-wheel training, and Connecticut requires only a minimum of 10 hours of total driver training, while Maine does not have any additional state-level training requirements.

Licensure and training requirements, paired with relatively low pay, may make school bus driving less appealing than other jobs requiring a CDL.*

*For more information on driver shortages and pay, see slide 39.
Sources: [BLS](#) (2018); [NSTA](#) (2013); [Arizona](#) (2018); [Connecticut](#) (2018); [Maine](#) (2017)

Federal regulations focus primarily on student safety, establishing requirements for school bus manufacturers

Regulatory Landscape



- NHTSA implements and enforces federal regulations related to vehicle manufacturing
- Regulations are codified in the Federal Motor Vehicle Safety Standards (FMVSS)
- More than 30 of the FMVSS apply to school buses, including standards for:



Pedestrian safety devices, such as stop signal arms — including requirements for the size and position of the stop sign, as well as the color and flash rate of its lights.



Passenger seating and crash protection — including requirements related to vehicle size, maximum occupancy, and seat height and position.



Other safety features — including requirements for the strength of bus bodies' joints, as well as rollover protection.

While many types of vehicles can be used for student transportation, “school buses” are federally defined



The National Highway Traffic Safety Administration (NHTSA) implements and enforces safety standards for motor vehicles

- NHTSA defines “school buses” as motor vehicles designed to carry more than 10 passengers — including the driver — that are “likely to be used significantly to transport preprimary, primary, or secondary students to or from school or related events.”
- For purposes of regulation, NHTSA considers a “school” to include any preprimary, primary, or secondary school.
- This interpretation does not include day cares, child care centers, or preschools — including Head Start programs. NHTSA does not regulate the vehicles used for transporting children to and from these facilities.

Determining whether or not “school buses” are required for transporting children to and from school is left up to states.

Certain federal laws require school districts to provide transportation to special student populations

Regulatory Landscape

The Individuals With Disabilities Education Act (IDEA) governs the provision of transportation for students with disabilities

- Districts must ensure that transportation services in students' Individualized Education Programs (IEPs) are provided at public expense and at no cost to families.
- Transportation services include travel to and from school; travel in and around school buildings; and the use of specialized equipment such as special or adapted buses, lifts, and ramps.

The McKinney-Vento Homeless Assistance Act governs the provision of transportation for homeless students

- Districts must provide these students with transportation to and from their "school of origin," either the last school a student attended or the school attended when a student was last permanently housed.
- Homeless children and youth are defined as individuals who lack a fixed, regular, and adequate nighttime residence.

The Every Student Succeeds Act (ESSA) governs the provision of transportation for students in foster care

- Districts receiving Title I funds must collaborate with the state or local child welfare agencies to ensure that transportation to schools of origin for children in foster care is provided, arranged, and funded.
- The current guidance from ED and HHS is non-regulatory, meaning the requirements will be difficult to enforce.

It is **critically important to provide these student populations with transportation**, and doing so can be a **significant logistical and funding challenge** for districts.

Some federal regulations limit the extent to which school transportation systems can coordinate with public transit

Regulatory Landscape



The FTA regulates public transit systems; its “tripper” regulations are intended to prevent public transit providers from displacing private school bus operators.

Public transit systems are allowed to make minor modifications to their service to accommodate school transportation needs



Modifications to **fare collection or subsidy systems**



Modifications to the **frequency of service**



Minimal route alterations from **route paths in the immediate vicinity of schools**



Transportation **exclusively for students and school personnel**

States determine student eligibility for transportation services and allowable vehicle types

Eligibility

States determine eligibility requirements for school transportation services for general education students:

- Eligibility is typically defined based on the distance between students' homes and the schools they attend or to which they are assigned.
- Grade levels are often a factor in determining eligibility, so that the distance required for eligibility is shorter for younger students than for older students.
- States may allow exceptions based on hazardous walking conditions, such as needing to cross railroad tracks or a highway while walking to and from school.

Vehicle Use

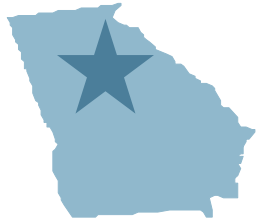
Though “school buses” are federally defined, states determine what types of vehicles may actually be used to transport students to and from school.

- Passenger vans cannot be sold to districts as “school buses” without meeting the relevant federal safety standards — but states may opt to allow the use of passenger vans regardless.
- While some states allow the use of alternative vehicles for school transportation, others mandate the exclusive use of school buses.

States have broad authority to determine **which general education students are eligible for transportation services**, as well as **what types of vehicles may be used** to transport students.

Sometimes, federal and state policy compound and make it difficult for districts to meet student needs

Regulatory Landscape



For example, in Atlanta:

- Atlanta Public Schools serves more than 3,000 homeless students
- Districts in surrounding counties serve an additional 9,000 homeless students

Federal law
requires Atlanta
Public Schools to
transport homeless
students to their
schools of origin



State regulations
require that Atlanta
Public Schools use
school buses to
transport these
(and all) students



Atlanta frequently
must send school
buses for one-off
trips to other
districts, which is
expensive and
inefficient

“For efficiency reasons, I’d like to **use smaller vehicles** like vans or town cars for these **one-off trips**, but **state law doesn’t allow it.**”

—John Franklin, executive director of transportation, Atlanta Public Schools

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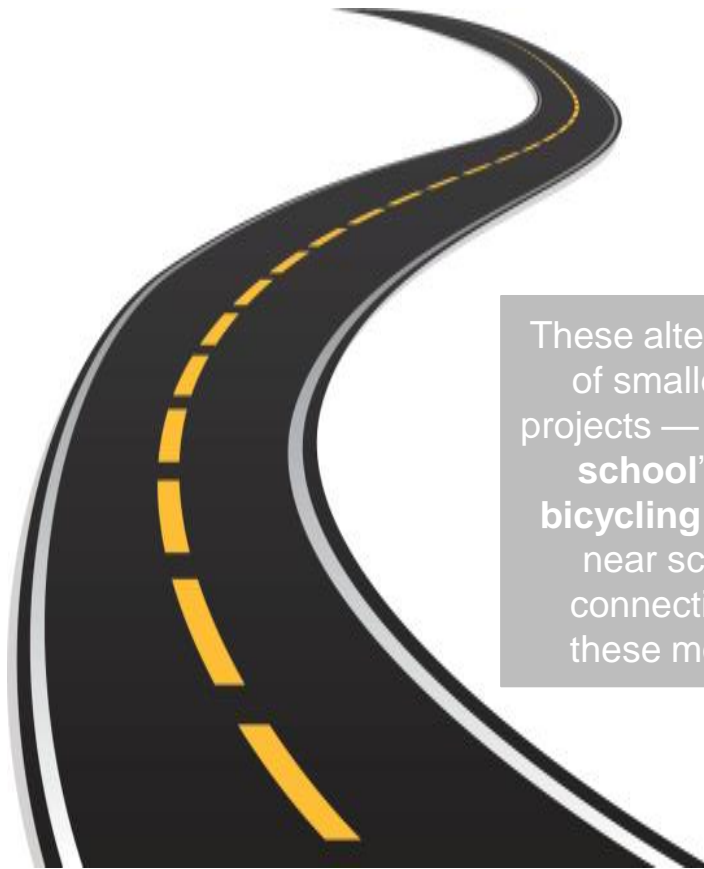
Conclusion

The federal government provides little funding for school transportation

Funding

The federal government plays a small role in funding school transportation through the **Fixing America's Surface Transportation (FAST) Act** — last reauthorized in 2015.

The FAST Act sets aside more than **\$800 million per year** under the Surface Transportation Block Grant Program to help state and municipal governments fund “**transportation alternatives**.”



These alternatives include a variety of smaller-scale transportation projects — including “**safe routes to school**” projects that improve **bicycling and walking** conditions near schools and create safe connections for students using these modes of transportation.

While the federal government regulates school bus manufacturing and safety, **states are largely responsible for funding their own school transportation operations.**

There are three ways in which states typically share the cost of school transportation with districts

Funding

	Actual costs or a funding formula	The number of students	Linear density or mileage
Definition	<ul style="list-style-type: none"> States reimburse districts for a portion of actual costs or based on a funding formula. 	<ul style="list-style-type: none"> States provide a lump sum to each district based on the number of students it transports. 	<ul style="list-style-type: none"> States base transportation funds on the number of bus miles traveled or a calculation of “linear density,” which represents the average miles traveled per student.
Calculation	<ul style="list-style-type: none"> These formulas typically estimate costs based on average expenditures, historical expenditures, or costs of other inputs like fuel and driver wages. 	<ul style="list-style-type: none"> These per-capita rates may be adjusted for cost factors (commonly fuel prices) or district characteristics (often to account for geographic sparsity that may drive higher transportation costs). 	<ul style="list-style-type: none"> Linear density calculations allow for adjustments for economies-of-scale differences between more urban and more rural districts. Many states adjust reimbursements in other ways to help offset higher costs in geographically large, sparsely populated districts.

Costs for operations (driver wages, maintenance, fuel) and capital costs (bus and facilities purchases) are **covered under the same formula allotment in some states. Others separate these costs** and may provide separate funding streams for capital expenditures.

Transportation funding challenges cause districts to divert money that could be spent for other purposes

Funding

In some cases, the state's share of transportation funding automatically adjusts for increases in actual costs.

But in some states ...

State funding levels are subject to legislative appropriations

AND/OR

State funding for transportation has stagnated in recent years

As states contribute a diminishing share of transportation costs, districts must fund the balance of those costs from other funding sources to maintain similar levels of service

- School districts have a natural incentive **to seek cost efficiencies**. But districts' ability to be efficient is **limited by state and federal laws and regulations** requiring bus service, establishing student eligibility for service, and limiting vehicle choices.
- Moreover, costs incurred to reap long-term gains from efficiency (like costs for adding GPS or alternatively fueled buses) require **large up-front investments** that aren't financially feasible in many districts.

Rural districts face unique challenges related to funding school transportation

Funding

Lack of Density

- Rural districts need to transport many fewer students than their urban counterparts. However, their student populations are much less concentrated and live farther from the schools they attend.
- Fewer students are being transported over longer distances, which drives up the cost per student ride.

Vehicle Use and Flexibility

- Many states require using school buses for transportation services, which means rural districts must use large vehicles to transport small numbers of students, resulting in lots of empty seats and poor fuel efficiency.
- Some states allow the use of smaller vehicles, like passenger vans. This enables rural districts to transport students with fewer empty seats, equating to lower costs per student ride — but safety trade-offs must be considered.

Lack of Alternatives

- Rural districts often have fewer transportation alternatives than their urban counterparts. While many urban districts rely in part on public transit, students in rural districts often lack access to reliable public transit.

The structure of rural districts presents challenges for funding an effective and efficient school transportation system — especially when these districts lack public transit alternatives and must comply with strict regulations around vehicle use.

States and districts have used a variety of strategies to increase revenue or reduce costs of transportation

Funding



Reduce service

Following state budget cuts, both Los Angeles and San Francisco **reduced transportation services**, only transporting about 5% of their general student population.



Reimburse families

In Ohio, families may accept **“payment in lieu of transportation”** from local school boards if busing is considered “impractical,” ranging from \$250/year to the full per-pupil cost.



Charge fees to families

Hawaii **charges a fee** at the state level that cannot exceed 50% of actual cost and that is **prorated for family income** and for students with disabilities.

Advertising on school buses

Some places — including districts in Colorado, New Jersey, and Texas — have turned to **advertising as a potential revenue source**. However, most states prohibit it, and **opponents cite various concerns**, including exterior ads’ distraction of other motorists, interior ads’ appropriateness for children, and the potential costs of defending advertising policies against legal challenges.

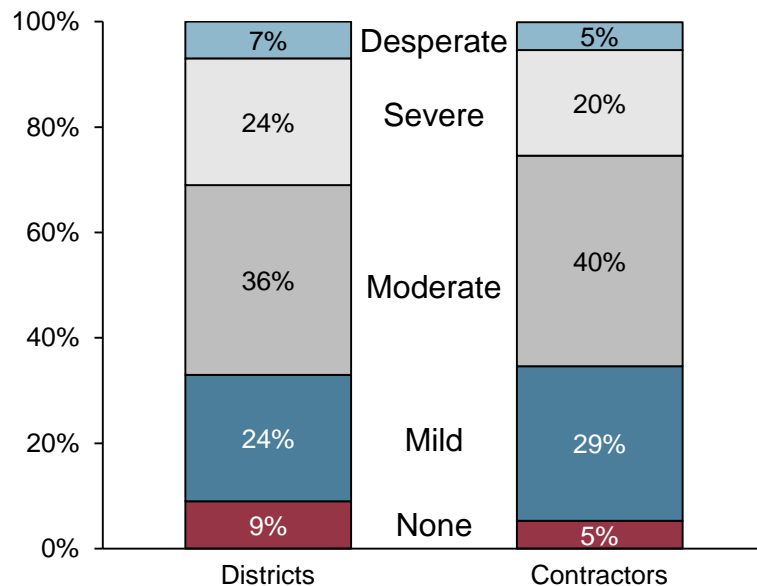
Funding



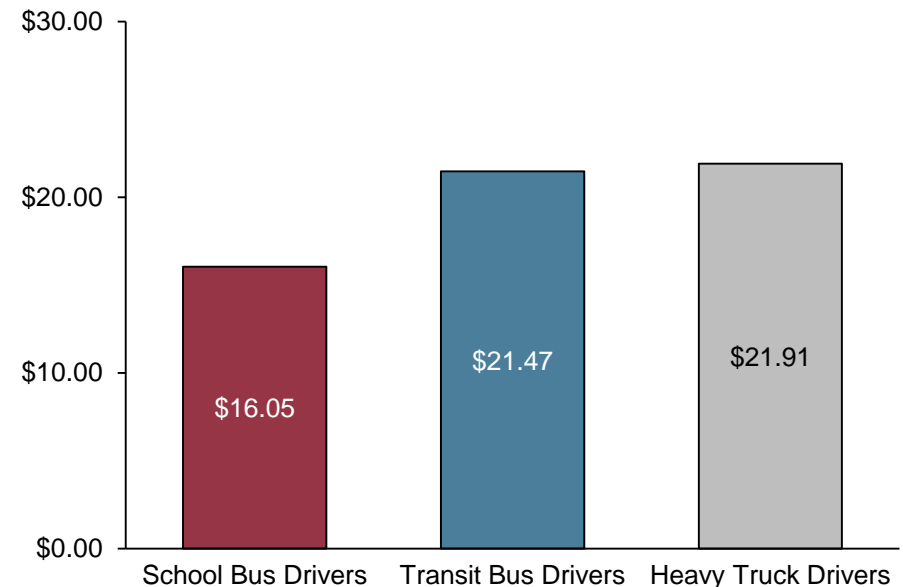
The ongoing school bus driver shortage, due in part to low relative pay, only exacerbates districts' funding challenges

Funding

Reported levels of school bus driver shortage
2018



Mean hourly wages of select professions requiring a CDL
2017



Both districts and contractors are **facing driver shortages**. This is due in part to the **relatively low wages** of school bus drivers compared to other professions requiring a CDL. However, funding challenges limit districts' and contractors' ability to raise wages.

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In recent decades, the growth of school choice policies has provided families with access to different types of schools

Most Common School Choice Policies

Open Enrollment

- Some states and districts offer “open enrollment” — either intradistrict or interdistrict — in district schools; intradistrict open enrollment policies typically allow students to choose any school within the boundaries of their resident school district, while interdistrict policies allow students to transfer to schools outside of their resident district.
- 47 states and the District of Columbia have some kind of open enrollment policy.

Charter Schools

- Charter schools are public schools, but unlike most traditional district schools, enrollment in them typically is not limited to a geographically defined attendance zone.
- 44 states and the District of Columbia allow charter schools to operate.
- There are now over 7,000 charter schools enrolling more than 3 million students nationwide. While this is only 6% of the total K-12 population, charter school enrollment represents a significant share of public school enrollment in some districts.

Private Schools

- Some states offer publicly funded private school choice, such as education savings accounts, vouchers, tax-credit scholarships, and other tax credits and deductions — all of which further broaden the range of education arrangements beyond the traditional neighborhood school.
- As of 2019, 65 private school choice programs operate across 29 states and the District of Columbia, accounting for more than \$2 billion in total spending.

School choice affects districts and school transportation

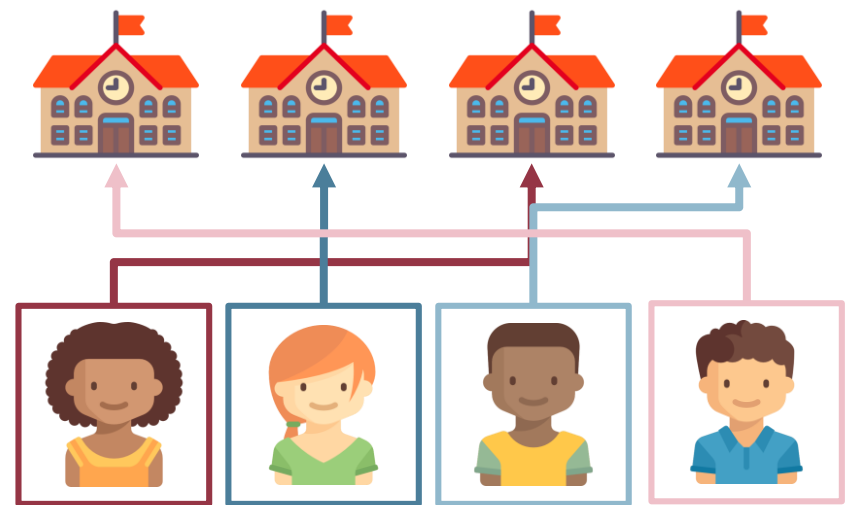
School Choice

The goal of school choice policies is to **provide students with access to more and better schools**. However, it also means that **more students are crossing town, rather than crossing the street, to get to and from school**.

Neighborhood School Model



School Choice Model



School choice is **changing the nature of many school districts** and **placing new demands on traditional transportation models** built around neighborhood schools. **Transportation limitations can undercut the purpose and intent of school choice policies** and prevent families from truly having access to the full range of education options.

School Choice

- For example, only 16 states require transportation for charter school students.**

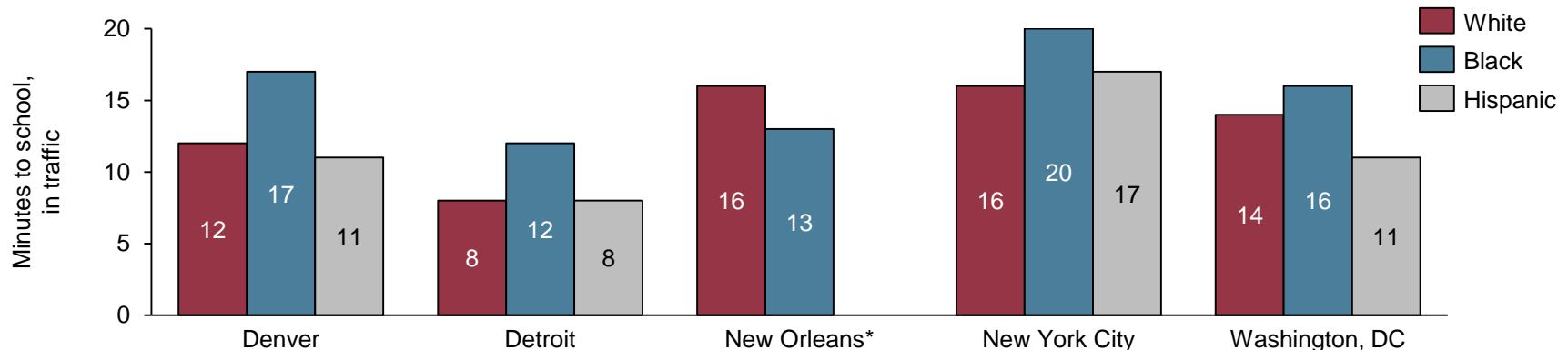


Transportation plays a critical role in enabling equitable access to schools of choice

Average driving time to school for 9th graders

By race and ethnicity, 2018

School Choice



- **Low-income students** and **students of color** tend to live in neighborhoods served by lower-performing schools; school choice options allow these students to **access higher-performing schools** in other areas.
- However, this often means that these **students must travel farther** than their more affluent and white peers in order to access higher-performing schools.
- For example, recent research by the Urban Institute in five high-choice cities found that black students face **longer rides to school, in terms of time and miles**, than white students.

If students are not able to fully access higher-performing schools due to transportation needs, then they don't really have school choice.

*The New Orleans data is based on students' home location and does not include Hispanic students.

Source: [Urban Institute](#) (2018)

High-choice urban areas often face similar transportation challenges ...

District-Level Challenges

- Costs and logistics of transporting students with special needs and highly mobile student populations
- Varying reliability of public transit options

School-Level Challenges

- Transportation logistics, especially at the beginning of the year, when enrollment is in flux
- Lack of alignment between district and charter schedules and calendars when charters rely on the district for transportation
- Difficulties with contracted bus companies, including a lack of responsiveness and unreliable buses and drivers

Student-Level Challenges

- Significant length of time that some students must spend traveling to and from school, whether by school bus or other transportation options
- Concerns about student behavior and safety during transit, especially for students using public transit

While **all districts face these challenges** to some extent, they are **particularly acute for high-choice urban areas**, where students have **many school options located throughout the city**.

... but vary widely in their transportation policies and supports

School Choice

	Yellow Bus Service		Public Transit		Other
	District	Charter	District	Charter	
Denver	✓		✓		Circulating “Success Express” buses service certain routes and neighborhoods.
Detroit	✓		✓		Some charters opt to provide yellow bus service for their students.
New Orleans	✓	✓			Yellow bus service is provided for some RSD* charter students, and other types of charter schools may have access to yellow bus service or to city bus passes.
New York City	✓	✓	✓	✓	
District of Columbia			✓	✓	Provides free public transportation passes for all students, including those enrolled in private schools. Some charter schools provide yellow bus service.

*Recovery School District
Source: [Urban Institute](#) (2017)

Costs associated with transportation affect how high-choice urban areas provide service and recruit students



- When charter schools provide their own transportation, some opt to have **tiered bus service**, where the same bus picks students up along multiple routes, dropping them off at the school at different times.



- Charter schools can **renegotiate their existing contracts** with transportation vendors, **share services with other charter schools**, or **opt for cheaper contracting options** that may use lower-quality buses.



- Some charter schools have **cut costs directly related to transportation**, like limiting the size of their central office or administrators' salaries.
- Others have **reduced expenditures elsewhere** in their budgets or **raised private money** to cover transportation costs.



- In response to high costs and other transportation challenges, some charter schools have **focused on neighborhood-based student recruitment**.

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Transportation has a long history with school integration, which increasingly intersects with school choice policies

Since the *Brown v. Board of Education* decision in 1954, school districts across the nation have struggled to create and maintain racially integrated schools.

- In the past, transporting students explicitly to desegregate schools was sometimes required by policies and court orders, as in the case of cross-district “busing” programs in the 1960s and ’70s.
- These programs were effective at reducing school segregation but often led to fierce backlash.
- Courts have since limited schools’ ability to consider race in school assignment policies, and data suggests that school segregation has remained stagnant or worsened in recent decades.
- Today, more districts and states are considering ways to create more integrated schools using school choice and school assignment models explicitly focused on diversity.

School transportation serves as an important tool to counteract the forces of residential segregation and give students access to schools they might not otherwise be able to reach.

- Recent estimates show that neighborhood segregation by race explains about 76% of the variation in school segregation by race across cities.
- Research has also found that black students travel farther to reach school than their white peers.
- Schools of choice have fewer guaranteed transportation supports than assigned district schools, and families may not have the resources or capacity to transport students across town on their own, inhibiting school choice models’ ability to serve communities equitably and to play a role in achieving integration.

There is evidence that **racially or socioeconomically integrated schools are associated with improved student outcomes** overall, and for low-income students and students of color in particular. But **inadequate transportation can be a barrier** to both integration and choice goals.

Several models combine choice and integration goals, with implications for transportation

Integration & Choice

Magnet Schools

- Offer unique curricular themes or instructional approaches designed to attract students across neighborhoods that are often segregated by race and socioeconomic status
- Enroll students from larger geographies than traditional public schools, either serving entire districts or multiple districts
- Usually provide transportation services for students at no cost to families

Diverse-by-Design Charter Schools

- Typically are explicitly committed to student diversity in their mission or design and have achieved a certain level of diversity within their actual enrollment
- Often use lotteries that are weighted in some way to account for student demographics
- To meet diversity goals, need to enroll students from various neighborhoods or towns due to residential segregation, making school transportation a key component of their success

Controlled Choice District Enrollment

- Allows parents to rank their school choices, while controlling for certain levels of school diversity and/or other factors
- Often weights student demographic information in admissions, or incorporates that information into enrollment policies in some way
- Affected by districts' features, like geographic size, the level of segregation across communities, and the distance between those communities — all of which influence the level of transportation service needed to provide equitable access

School transportation services play an important role in supporting these models and providing equitable access to schools.

Examples of these models vary, but innovative approaches can help create more diverse schools

Integration & Choice

While these models vary widely in their success at creating diverse schools, the examples below show that **innovative approaches can increase efficiency and allow schools and districts to serve more students** across a larger number of communities.

Model	Location	Description
Magnet Schools	Charlotte-Mecklenburg Schools (NC)	<ul style="list-style-type: none">• Admits students to magnet schools using a lottery that accounts for socioeconomic status based on multiple factors.• Divides the district into three “transportation zones” designed to balance socioeconomic integration with parent choice, transportation time, and cost.• Provides transportation for magnet students who attend countywide schools or schools in their “transportation zone.”
Diverse-by-Design Charter Schools	Crossroads Charter Schools (MO)	<ul style="list-style-type: none">• Supports diversity by offering its own transportation, which the district does not provide for charter schools.• Offers bus service to students who live one mile or more away from their designated school.• Partners with three other local charter schools to jointly contract for transportation services, increasing scale and efficiency.
Controlled Choice District Enrollment	Jefferson County Public Schools (KY)	<ul style="list-style-type: none">• Informs its enrollment policies using a “school diversity index” that accounts for average household income, percentage of white residents, and educational attainment.• Provides transportation for students living a mile or farther from their school.• Uses a “depot” model, where some students transfer buses at certain stops.

Sources: interview with Akeshia Craven-Howell, associate superintendent for student assignment and school choice, Charlotte-Mecklenburg Schools (2019); interview with Courtney Hughley, chief operations officer, and Rachel Uptergrove, operations manager, Crossroads Charter Schools (2019); interviews with Cassie Blausey, executive administrator of school choice, and Randy Frantz, at the time director of transportation, Jefferson County Public Schools (2019)

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School transportation remains largely unaffected by technological advancements in other transportation sectors

Data Use



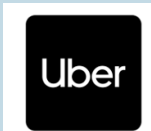
Hybrid and Electric Cars

Over 4.5 million hybrid cars have been sold in the U.S. — a remarkable trajectory since their introduction to the U.S. automobile market in the late 1990s. There are about **1 million electric cars** on the road, a number that is predicted to soar over the next two years.



Advanced Driver-Assistance Systems

Self-parking and automatic braking technology is common on personal luxury vehicles, and **mass-market self-driving cars could be around the corner.**



Ridesharing

Services like Uber and Lyft have **revolutionized on-demand personal transportation**, creating significant competition for decades-old traditional taxi services.

MEANWHILE ... - - - - -



Student Transportation

Little has changed in student transportation since 1939, when representatives from states developed the first set of school bus standards. Nearly 80 years later, **the iconic yellow school bus continues to dominate public school transportation.**

The “data deficit” is one of the largest issues affecting the operational efficiency of student transportation

Data Use

Most transit systems routinely track **basic information** like ...



Cost per ride



% of seat capacity utilized



On-time departures and arrivals



Length of ride times

... but many **school transportation systems fail to collect** these data consistently, if at all.

“You can’t manage what you don’t measure: **If you want to increase ridership and make buses fully loaded, then you should** take attendance on every route every day. If you want to limit miles per gallon, you have to measure idle time. If you want more efficient routing, **you have to use GPS and routing software.**”

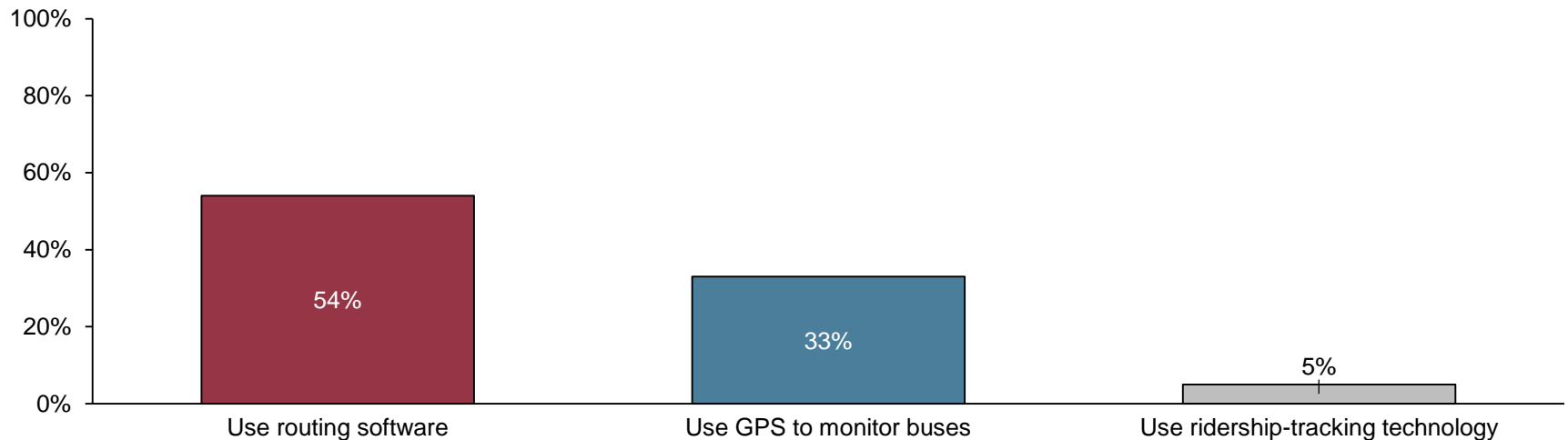
—Doug Martin, president, TransPar

One of the most basic elements of the data deficit is a lack of GPS technology on school buses

Most school transportation fleets lack common technology that can improve efficiency.

School transportation operations' use of technology

By technology type, 2015



- **Routing software** can help districts and contractors limit the number of routes and buses needed to adequately serve students.
- **GPS technology** can track whether school buses are traveling along their routes as planned, and it can provide information about traffic patterns and route delays.
- **Ridership-tracking technology** allows school transportation operators to see which students are riding the bus and whether their buses are operating at or near full capacity.

Many districts lack accurate ridership data, but there are solutions to the problem

Data Use

Ridership information would allow transportation administrators to plan bus routes in a way that maximizes the number of students transported per trip.

BUT ...

Many districts base their ridership figures on eligibility rather than the number of students who actually use the service.



Inaccurate or nonexistent data make it difficult or impossible to plan or adjust fleets or routes as needed to maximize efficiency.

One Solution Is RFID ...

Radio-frequency identification (RFID) is one of the most effective technologies for tracking ridership.

Students can carry RFID cards or badges that log when and where they enter or exit school buses.

For Example ...

ZPass, a product provided by Zonar Systems, is a badge attached to students' backpacks that signals a scanner on the school bus when students enter or exit.

Cincinnati Public Schools has used ZPasses to track ridership since 2013.

ZPass data are now helping the district save money by streamlining bus routes.

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School buses are a safe mode of transportation for getting children to and from school

Safety

School buses only account for a small share of child deaths in motor vehicle accidents.

<2%

From 2007 to 2016, 1.5% of child deaths in motor vehicle accidents occurred on a **school bus**.

7%

By comparison, students traveling with a **teen driver** in a private vehicle accounted for 7% of those deaths.

45%

Children traveling with an **adult driver** in a private vehicle accounted for 45% of all deaths of children riding in a motor vehicle.

Most fatalities related to school bus accidents do not involve children on the bus.

<5%

Less than 5% of deaths in school transportation accidents involved children who were on school transportation vehicles.

17%

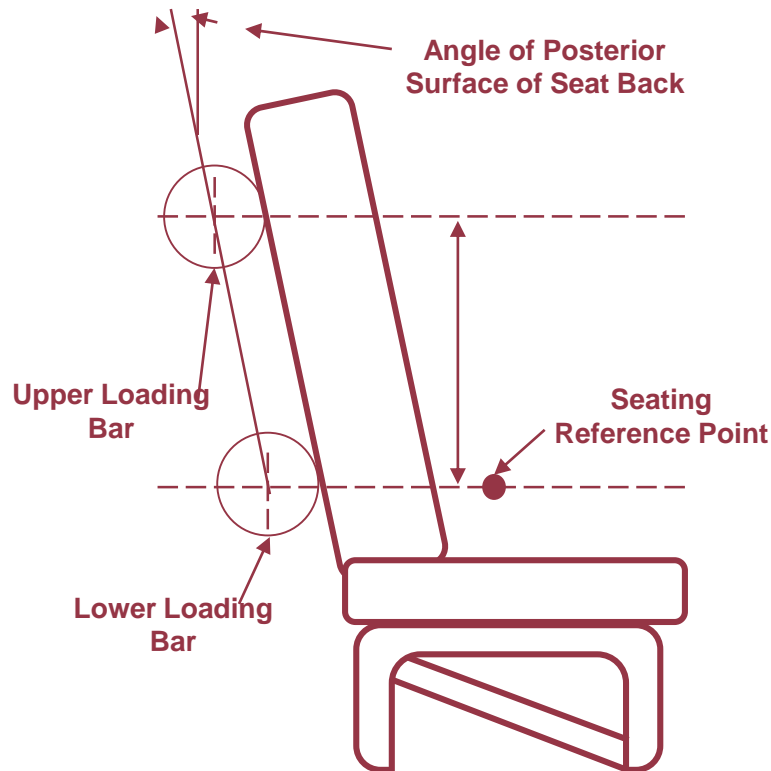
Nearly 20% of fatalities in school-transportation-related crashes involve pedestrians.

70%

Seven in ten fatalities in school-transportation-related crashes involve occupants of other vehicles.

School buses are specifically designed to be safe, using “compartmentalization” to protect students in a collision

Safety



Buses are equipped with strong, closely spaced seats with energy-absorbing seat backs — a design called **compartmentalization**, which creates a “protective envelope” around passengers that is not dependent on the use of a restraint system like a seat belt.

Compartmentalization is **particularly effective in school buses** because they are generally heavier than the vehicles with which they collide, impart lower crash forces on their occupants, and distribute crash forces differently than passenger cars and light trucks.

The NHTSA describes compartmentalization as “**an excellent concept for injury mitigation.**” Compartmentalization requirements first became effective for newly manufactured school buses in 1977 and have remained largely unchanged.

Federal, state, and local policies work in concert to implement and regulate other safety measures on buses

Safety

Safety Regulations

The Federal Motor Vehicle Safety Standards, or FMVSS, codifies requirements for vehicles; more than 30 of them apply to school buses.

The standards stipulate required safety features, such as **rollover protection, emergency exits, joint strength, and mirrors.**

Many state and local jurisdictions implement safety measures in addition to federal requirements.

Bus Cameras

The inclusion of cameras inside or outside buses allows for **monitoring and documentation of student behavior** on the bus and aims to **increase pedestrian safety** outside the bus.

School transportation operators report having **cameras on 2/3 of their buses**. Forty percent report having them fleet-wide. Of buses outfitted with cameras, 60% have **two or three cameras on board**.

Stop-Arm Cameras

Stop arms are required by federal regulations, but some districts also include **stop-arm cameras that capture images of cars illegally passing buses.**

Nearly 20% of fleets have stop-arm cameras on at least some of their buses.

Fifteen states (AL, AR, CT, GA, IL, MD, MS, NC, PA, RI, SC, VA, WA, WV, WY) have laws allowing the use of side-arm cameras.

Seat belts are not required on many school buses, but safety agencies recommend that new buses have them

Safety

Safety

- School buses are **statistically the safest way to get to school**, thanks in large part to the compartmentalization design of their seats.
- Seat belt advocates worry that **bus seats don't adequately protect children** in side-impact crashes or rollovers.
- Overall, research indicates that **using seat belts on school buses only minimally improves rider safety**.

Costs

- Opponents of seat belts on buses point to the **cost** of installing them. The Congressional Research Service explains that adding **seat belts to buses reduces their seat capacity**, forcing states or districts to purchase more buses.
- Moreover, adding seat belts **costs roughly \$7,000-\$11,000 per bus**.
- Given the costs, **opponents argue that other improvements**, like equipping buses with onboard data recorders or improving the safety of walking and biking routes to school, might be more effective in keeping children safe.

Recent Action

- In 2015, NHTSA stated that “seat belts save lives ... **every child on every school bus should have a three-point seat belt**,” but it stopped short of requiring them.
- In 2018, the National Transportation Safety Board (NTSB) recommended that NHTSA require all new buses to include seat belts, along with other technology upgrades that improve safety.
- **Only eight states** have laws requiring the installation of seat belts on school buses, and some of these laws are subject to appropriations or approval by local jurisdictions.

Public transit is a safe method of transporting students to school, despite concerns about danger and crime

Safety

Traffic Safety

- In terms of accidents and casualties, there is **little difference between yellow school buses and public transit**. Both have significantly lower traffic casualty rates than automobiles.
- **Cities with higher public transportation use have fewer traffic fatalities**, suggesting that increasing transit use is safer for everyone, not just students.
- **The four metro areas with the most transit trips per capita and lowest traffic fatalities per 100,000 residents** — NYC, San Francisco/Oakland, Boston, and Washington, D.C. — **all rely on public transit** to transport students to school every day.

Personal Safety

- When it comes **to personal safety**, comparing traditional school buses and public transport is **more nuanced**.
- Some fear that students will be exposed to more bullying, harassment, and violence on public transit. However:
 - Providing public transit to school **may increase safety for students who previously walked** through dangerous neighborhoods to get to school.
 - According to data from 2004 to 2008 from the Bureau of Justice Statistics, **less than 1% of violent victimizations and property victimizations occur on public transportation** vehicles or in stations.

A declining share of students walk and bike to school, and they can face safety risks when doing so



- There has been a **steep decline in walking and biking to school in recent decades** — falling from 49% in 1969 to 10% in 2017.
- This is due in part to the **growing distance between students' homes and their schools**, meaning more and more families are opting to drive their children to school.



There is **little data on the safety of walking and biking** to school, but there are **ways to make these options safer** for students:

- Well-maintained sidewalks and crosswalks
- Physical changes to make crossing intersections safer
- Awareness and enforcement efforts to reduce risky driving behaviors
- Safe crossing programs to ensure a safe walk or ride to school

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School transportation negatively affects the environment and children's health, but new technology can help

Environmental Impact



America's fleet of roughly 480,000 school buses drive nearly 3.5 billion miles every year. Many students also travel to school in personal vehicles, contributing millions more miles for school transportation.



All these vehicles emit millions of tons of greenhouse gases per year into the environment — contributing to global warming — and also expose children to harmful pollutants that can affect their health and academic performance.



Research has demonstrated that cleaner fuels and other technology can reduce the environmental impact of school transportation. However, 95% of school buses are powered by diesel fuel, and only 40% are equipped with related “clean diesel” technology.

Recent studies have found that children riding on buses with clean air technologies or fuels experienced **lower exposures to air pollution, less pulmonary inflammation, and more rapid lung growth over time**, as well as **reduced rates of absenteeism and improvements in test scores**.

There are a number of strategies that can reduce the environmental impact of school transportation

Environmental Impact

Idling Time Reduction	<ul style="list-style-type: none">Students can be exposed to harmful diesel fumes — even when not in transit — if school buses run their engines while stopped, known as idling. By limiting idling time, school transportation operators can reduce unnecessary pollution.
Diesel Retrofit Technologies	<ul style="list-style-type: none">Diesel retrofit technologies are products that can be added to existing diesel school buses in order to reduce emissions, including installing devices in buses' exhaust systems and upgrading certain engine components.
Propane and CNG School Buses	<ul style="list-style-type: none">Propane and CNG school buses* do not significantly improve air quality compared to the most recent models of diesel buses (2010 and newer). This limits the potential environmental benefit of these options, unless they are being used to replace older diesel buses.
Electric School Buses	<ul style="list-style-type: none">Electric school buses* — which have only been commercially available since 2015 — are zero-emission vehicles, meaning they do not release harmful tailpipe emissions like other types of vehicles.** As a result, electric options are by far the most environmentally friendly school buses.
Encouraging Walking and Biking	<ul style="list-style-type: none">Walking and biking can improve students' health and has been linked to academic benefits, like a higher degree of alertness during school hours and better grades. Replacing motorized travel with walking and biking could also reduce exhaust and greenhouse gas emissions.

*For more detail about these fuels, see the Glossary on slide 13.

**Electric buses do not release emissions. However, if they are powered by electricity generated from the burning of fossil fuels like petroleum or natural gas, as opposed to renewable options, like solar and wind energy, then there are still emissions from that energy production.

Sources: [EPA](#); [Georgia Tech](#) (2011); [EPA](#); [Clean Cities](#) (2014); [School Bus Fleet](#) (2016); [Preventive Medicine](#) (2018); [BMC Public Health](#) (2018)

These strategies can generate benefits (including cost savings), but each has its own implementation challenges

Environmental Impact

Strategy	Benefits	Challenges
Idling Time Reduction	<ul style="list-style-type: none"> Conserves fuel and reduces maintenance costs Extends the life of school bus engines 	<ul style="list-style-type: none"> Requires adequate training and support for drivers, which can be complicated by driver shortages* and high turnover
Diesel Retrofit Technologies	<ul style="list-style-type: none"> Can improve students' health and academic outcomes More cost-effective than other interventions, like smaller class sizes 	<ul style="list-style-type: none"> Vary considerably in both cost and effectiveness at reducing emissions
Propane and CNG School Buses	<ul style="list-style-type: none"> Run on cheaper fuels and require less maintenance Do not need to be parked in heated facilities overnight in cold climates 	<ul style="list-style-type: none"> Cost 9% and 33% more than diesel buses, respectively Require infrastructure investments, like fueling stations and additional training for maintenance staff
Electric School Buses	<ul style="list-style-type: none"> Run on electricity — the cheapest fuel option — and require the least maintenance Can use vehicle-to-grid and vehicle-to-building capabilities to further reduce energy and facilities costs 	<ul style="list-style-type: none"> Cost more than twice the price of diesel buses Require charging stations, coordination with local utility companies, and close management of charging plans
Encouraging Walking and Biking	<ul style="list-style-type: none"> Reduces the overall need for school transportation, meaning fewer buses, routes, and drivers 	<ul style="list-style-type: none"> Limited by the growing distance that students travel to school, as home-to-school distance has increased over time

*For more information on school bus driver shortages, see slide 39.

Sources: [ADEQ](#) (2004); [NBER](#) (2019); [School Bus Fleet](#) (2015); [AFLEET online tool](#) (2018); [School Bus Fleet](#) (2016); [Preventive Medicine](#) (2018)

Many federal and state programs incentivize the use of cleaner fuels and technology

Environmental Impact

Diesel Emissions Reduction Act

Under DERA, the **EPA awards grants and rebates to help replace or retrofit older diesel vehicles** — including school buses. **Roughly \$40 million will be available in 2019** for projects that significantly reduce diesel emissions.

Fixing America's Surface Transportation Act

The FAST Act sets aside more than \$800 million per year under the Surface Transportation Block Grant Program to help state and municipal governments fund “transportation alternatives.”*

All 50 states and the District of Columbia **provide some sort of incentive for using alternative fuels** — some explicitly for school buses. For example:



Clean School Bus Grants

Provides grants for purchasing new school buses or retrofitting older school buses with emissions-reducing parts or technology.



School Bus Retrofit Reimbursement

Reimburses school districts for the cost of converting gasoline buses to more fuel-efficient engines or to engines using alternative fuels.



Revolving Loan Program

Provides zero-interest loans to school districts for purchasing alternative fuel school buses, fuel systems, equipment, and fueling stations.

*For more information on this program, see slide 33.
Sources: [EPA](#); [School Bus Fleet](#) (2018); [AFDC](#)

The recent legal settlement with Volkswagen is also providing funding for these efforts

Environmental Impact

11 Million Vehicles

In 2015, Volkswagen admitted to outfitting diesel vehicles with software that enabled them to cheat on emissions tests — **nearly 600,000 vehicles in the U.S. and over 11 million worldwide** — leading to massive recalls in the U.S., Germany, and more than two dozen other countries.

\$25 Billion in Settlements

Volkswagen has agreed to pay **more than \$25 billion in the U.S. for claims from owners, environmental regulators, states, and dealers**, and offered to buy back about 500,000 polluting U.S. vehicles. The buybacks will continue through the end of 2019.

\$2.9 Billion in Funding

Of the \$25 billion in reported settlements, **\$2.9 billion will be distributed to states through a mitigation trust** that will fund projects designed to reduce harmful emissions from diesel vehicles. Funding can be used to **replace or repower older diesel vehicles, including school buses**, transit buses, large trucks, and freight trains.

Funding from this settlement and federal and state programs helps reduce the environmental impact of school transportation, but it is far from sufficient — especially if the goal is to increase the share of electric school buses in America's fleet.

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Despite the challenges, improvement and innovation in school transportation are possible

Recommendations

The significant transportation challenges that districts and states face can:

- ✓ Lead to expensive and inefficient service
- ✓ Limit investments that improve safety and reduce environmental impact
- ✓ Create inequitable access to schools

However, there are many opportunities for school transportation to improve and innovate.

- 1 Data and Technology**
States and districts should invest in tools and technology to help **collect, analyze, and use data to improve efficiency and make informed decisions** about school transportation systems.
- 2 Funding and Incentives**
States should **provide adequate overall funding for school transportation services and incentivize transportation operators** to provide effective and efficient service.
- 3 Capital Investments**
States should **support and prioritize capital investments** — like new buses and other infrastructure — which may have higher up-front costs but **lead to substantial savings in the long term**.
- 4 Increased Collaboration**
Districts should **consider innovative ways to collaborate on providing school transportation services**, including partnerships between districts, or improved coordination across sectors.

School transportation operators need more data about their own operations

Recommendations



- Technology like GPS, RFID, and better data systems can **allow school transportation operators to collect and analyze important information**, like which modes of transportation students use to get to school, how many miles school buses travel, and whether school buses are operating at full capacity.



- Using this data, **school transportation operators can make informed decisions** about how to improve operational efficiency; reduce costs or serve more students; and provide transportation that is safer, more equitable, and more environmentally friendly.

Access to more data improves school transportation operators' understanding of their fleets and operations, which can lead to better service and decision-making.

States should provide more transportation funding and incentivize effective service

Recommendations



- Students now travel farther to get to school, and transportation costs per student have increased over time, meaning that states need to **provide more overall funding to adequately support school transportation services**.



- States should **ensure that transportation funding is comparable across school sectors**. Only 16 states require transporting charter students, presenting funding challenges for many charter schools that want to provide transportation services.



- States could also **incentivize efficiency or other positive outcomes** — like reduced environmental impact or increased diversity in schools — by providing additional funding for school transportation operators that meet certain targets.

Increasing and improving funding for school transportation can help operators provide services that are more effective and efficient for both district and charter students.

States should prioritize funding for capital investments that lead to long-term savings

Recommendations



- By providing additional funding for capital investments, states can **help districts, schools, and transportation operators afford improvements with higher up-front costs** that generate long-term savings.



- For example, investments in diesel retrofit technologies, alternatively fueled buses, and related infrastructure, like fueling and charging stations, can **benefit the environment while reducing fuel and maintenance costs.**



- Similarly, investments in safety infrastructure, like crosswalks, curb extensions, and bike lanes, can enable students to safely walk and bike to school, **improving their health and reducing the need for transportation services.**

Supporting capital investments in infrastructure can allow school transportation systems to make smart improvements that benefit students and lead to long-term savings.

Collaboration between districts or across sectors could lead to promising solutions

Recommendations

Multi-District Collaboration

- Collaboration among districts can **increase economies of scale** and **reduce the transportation burden** on individual districts.
- Districts could **provide joint transportation services** across district lines, **work together on certain projects or initiatives**, or simply **share information across district lines** to improve decision-making.

Multi-Sector Collaboration

- Districts can also **collaborate with organizations in other sectors** beyond education, offering opportunities for districts to **leverage a wider array of knowledge and expertise**.
- This collaboration could take many forms, like **coordinating with transit agencies and regional planning entities** on transportation and safety issues, **partnering with local utility companies** to implement electric school bus fleets, or **working with housing authorities** to address school and neighborhood segregation.

By collaborating with one another or with other sectors, districts can take on more comprehensive approaches that address transportation and other challenges on a larger scale.

In some places, districts are collaborating to streamline transportation services

Recommendations

Many opportunities exist for districts to work together when providing school transportation services:

- Sharing staff to reduce administrative costs
- Consolidating bus storage, maintenance, and fuel to reduce operational costs
- Sharing spare buses to increase districts' overall capacity
- Entering shared service agreements to provide joint transportation services, either for all students or certain populations

Some states already provide ways for districts to coordinate on certain school transportation needs. For example:



Rhode Island

Statewide Student Transportation System provides shared transportation for schools of choice, students with disabilities, and students traveling out of their district.



Michigan

Intermediate School Districts may provide services like transportation for students with disabilities, transportation for field trips, and driver training.



Pennsylvania

Intermediate Units may provide transportation services for students with disabilities.

MPOs are one example of how multi-sector approaches could improve service

Recommendations

Metropolitan Planning Organizations (MPOs)

- MPOs are **federally mandated bodies** that are required for metropolitan areas with a **population of at least 50,000**.
- They are responsible for producing **long-range plans** for significant transportation projects and **shorter-term Transportation Improvement Programs** for the region.
- Any transportation project within the metropolitan area being built with federal funds **must be included in these regional plans**.

MPO activities **vary from region to region**, particularly related to the size of the metropolitan area and corresponding size of MPO staff. But MPOs currently **engage in a wide array of planning activities** touching on land use, public health, safety, emergency preparedness, and even schools.

There are a number of potential federal interventions that could encourage or require MPOs to take on a role in coordinating school transportation:

- 1 Issuing an **agency letter** from the executive branch calling on MPOs to address regional school transportation issues
- 2 Amending **language in federal authorization** to prioritize or require MPO planning
- 3 Completely **shifting both planning and operations** for school transportation to MPOs

In Florida, Hillsborough County has had success working with its MPO

Recommendations



- Hillsborough County Public Schools (HCPS), serving the Tampa area, is one of the largest school districts in the country.
- HCPS runs more buses than the local transit authority and is roughly the size of the state of Maryland.
- In 2015, Hillsborough County's MPO added a school board member to its board and created a School Transportation Working Group.

THEN

- HCPS had little to no communication with the local MPO.
- HCPS did not coordinate with other important transportation and safety agencies.
- HCPS lacked a consistent way to make decisions affecting school transportation.

NOW

- An HCPS school board member has a vote on the local MPO's board.
- HCPS provided the transportation department with its schools' attendance zones for the first time and coordinates with the sheriff's office on crossing guards.
- HCPS created a transportation committee with three board members and staff.

Simply advocating for a "school seat" at the transportation table could be a relatively easy and critical first step in many metropolitan areas to enable coordination among school districts, regional planning agencies, and other important stakeholders.

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Conclusion

Conclusion

America's school transportation sector is vast, with roughly 480,000 buses transporting millions of students to and from school every day.

However, the sector is currently facing many challenges. School districts struggle to provide efficient transportation services, as costs escalate and more students attend schools outside their neighborhoods.

We hope this deck will serve as a useful resource for policymakers and the broader education sector as they grapple with the benefits and trade-offs of policies aimed at meeting the transportation needs of students and families.

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Conclusion



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To see all of our work on school transportation, please visit www.bellwethereducation.org.

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